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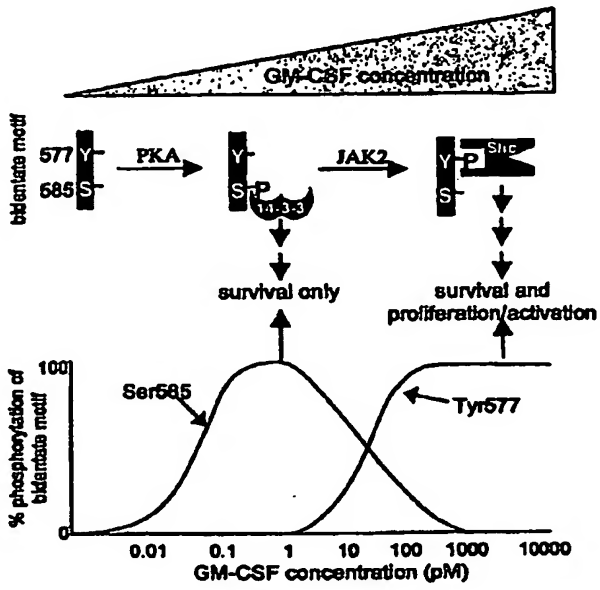
(54) Title: A BIDENTATE MOTIF AND METHODS OF USE



(57) Abstract: The present invention relates to a novel bidentate motif that is composed of two adjacent residues of tyrosine and serine which have been found to be involved in the binding of crucial cytoplasmic proteins which are involved in cell signalling pathways. In some cases, the cytoplasmic proteins are ubiquitous proteins involved in cell signalling pathways that may include mitogenesis, transformation and survival. The bidentate motif may have a sequence alignment N-X-X-Y-(X)$_{1-13}$-[R/K/H/Q]-[X/Ψ]$_{2-3}$-S/T-X-P; Y-(X)$_{1-15}$-[R/K/H/Q]-[X/Ψ]$_{2-3}$-S/T-X-P; or N-X-X-Y-[X]$_{1-30}$-[R/K/Q/H]-[X]$_{1-4}$-[S/T]-X-p wherein X is any residue, Y is tyrosine, S/T is serine or threonine and Y is a hydrophilic residue or an equivalent thereof. Preferably the residues are Tyr577 and Ser585 of the common βc of the GM-CSF/IL-5/IL-3 receptor.

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